Drone Management System SRS

1 Introduction

1.1 Purpose

The purpose of this document is to specify software requirements for the 'Drone Management System' proposed by our client FAA. It is intended for both the stakeholders and the developers to fully understand the system and will be proposed to FAA for its approval.

1.2 Product Scope

By managing drone information among the United States, Drone Management System aims to provide target users with drone information and facilitate airspace safety. By using this system, FAA can manage the database while authenticated users will be able to submit and retrieve information from user interface.

2 Overall Description

2.1 Product Perspective

Drone Management System is a replacement for FAA's outdated database system. More specifically, the database designed in our new system is freshly organized with a read-only access to the old database. Due to its functionality, new system consists of a user interface for user access and a database for information storage and management.

2.2 Product Functions

2.2.1 User Functionality

(1)User can sign up at first time and sign in if it already created an account.

(2)User can input drone information including its owner, type, serial number.

Initial Step-By-Step Description

-user sign into system

-system provides a button for user to create drone information form.

-user input drone information into that form and submit

-system get drone information

(3)User can search and request drone information if it has logged in.

Initial Step-By-Step Description

-system provides search form to let user fill in. The form can include owner, type, serial number.

-user input information according to the form and submit

-system gives out detailed information of drones which satisfied user input condition.

(4)User can upload information about drone anytime at anyplace.

This functionality prefer a mobile application to implement. Such when firefighters see the drone, they can directly take pictures of it and search its information right away by mobile devices.

2.2.2 Database Functionality

New database is a replacement to the previous outdated database. Its structure is based on product functionality. The database should store all aspects of information provided by the users and allow manager to add, remove and edit any information

stored in the database. Besides, search function provided to users also requires this database to be well-organized to facilitate searching.

2.3 User Classes and Characteristics

The user expect to be anyone who has an Internet access and wants to upload and search drone information from our system. There are multiple kinds of users including drone owners, authorized agencies such as police and firefighters and suspicious users who wants to get drone information for particular use.

The manager expect to be people who are authorized by FAA to manage this system.

2.4 Operating Environment

This system is based on present operating environment using by FAA. It's software however, should support most user access. So, it would be deployed via website and support most popular browsers such as Internet Explorer. Besides, in terms of mobile convenience, mobile application of this software is also expected. Thus, it should also support the most popular mobile operating system such as IOS and Android.

3 Other Non-functional Requirements

3.1 Security Requirements

System should grant access only to authorized agencies which means it should distinguish authenticated users from unauthenticated ones. Thus there should be an identification mechanism which can include a whitelist of authorized agencies or an artificial authorization checking system.

3.2 Authority Requirements

This system should provide authority to all users since it is provided by FAA, a federal official organization. Thus, it should have the ability to judge validness of user-input drone information or at least provide loose notification to users on information they provided.